



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,463	09/27/2004	Kazuyoshi Honda	10873.1171USWO	2211
53148 7590 04/01/2008 HAMRE, SCHUMANN, MUELLER & LARSON P.C. P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402				
EXAMINER				
WIECZOREK, MICHAEL P				
ART UNIT		PAPER NUMBER		
4172				
MAIL DATE		DELIVERY MODE		
04/01/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,463

Applicant(s)

HONDA ET AL.

Examiner

Michael Wieczorek

Art Unit

4172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)
Paper No(s)/Mail Date 9/27/2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-4, drawn to a method for manufacturing a film using vapor deposition.

Group II, claims 5-9, drawn to an apparatus for the manufacturing of film.

Lack of Unity

Lack of unity of invention may be may only become apparent “a posteriori,” that is, after taking the prior art into consideration, in the case of independent claims to A + X and A + Y, unity of invention (i.e. species) is present a posteriori as A is common to both claims.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature which is referred to Annex B of Appendix A1 of the MPEP (Administrative Instructions under the PCT, “Unity of Invention”). The express “special technical features” is defined as meaning those technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art.” (Rule 13.2). Unity exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding claimed special

technical features. In this case, the technical feature shared by each invention is an apparatus with both an electron beam evaporation source and a resistance evaporation source.

The question of unity of invention has been reconsidered retroactively by the examiner in view of the search performed; a review of U.S. 4,662,312 (Aoki), makes clear that the inventions of the groups I-II lack the same or corresponding special technical feature because the cited reference(s) appear to demonstrate that the claimed technical feature does not define a contribution which each of the inventions, considered as a whole, makes over the prior art. Accordingly, the prior art of the record supports restriction of the claimed subject matter in to the groups as mentioned immediately above.

2. During a telephone conversation with Doug Mueller on February 28, 2008 a provisional election was made with traverse to prosecute the invention of group II, claims 5-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-4 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/509463, filed on April 27, 2004.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "in this order" in claim 6 is a relative term which renders the claim indefinite. The term "in this order" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "in this order" fails to add definitive structural limitations to the apparatus that would be essential for one skilled in the art to recreate the apparatus. An indefinite number of configurations of the apparatus can be constructed based off of the use of this term in the claim.
4. Claim 9 is rejected as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (U.S. Patent # 4,662,312).

Claim 5 is drawn to an apparatus for manufacturing a film that comprises both an electron beam evaporation source and a resistance heating evaporation source.

Aoki recites in its claims:

“An apparatus ...wherein the evaporation source of the film forming assembly comprises an electron beam evaporation source” (see claim 8) and “An apparatus ...wherein the evaporation source of the film forming assembly comprises a resistance heating evaporation source” (see claim 9).

Aoki clearly teaches a claimed invention which recites an apparatus for manufacturing film that has both an electron beam and resistance heating evaporation source.

7. Claims 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano (U.S. Patent # 6,863,996).

Claim 5 is drawn to an apparatus for forming a film comprising both an electron evaporation source and a resistance heating evaporation source. Claim 7 recites the apparatus of claim 5 and further comprises of a nozzle for introducing a reactive gas.

Yano describes an apparatus containing a K-cell 14 (the resistance heating evaporation source), an electron beam evaporation source 15, and a feed gas inlet port 11b (figure 1, column 7 lines 13 through 45). The “feed gas inlet port” performs the exact same function as the “nozzle” as recited in claim 7.

8. Claims 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohseto et al (U.S. Patent # 4,720,436).

Claim 5 is drawn to an apparatus for forming a film comprising both an electron evaporation source and a resistance heating evaporation source. Claim 8 recites the apparatus of claim 5 and further comprises a bias device to provide bias voltage.

Ohseto describes an apparatus containing sources for electron beam evaporation, sources for resistance heating evaporation, and a bias power source (column 5 lines 18 through 55).

For the reasons set forth above, all the claims are properly included in these 102 rejections.

Conclusion

No claims were allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Wieczorek whose telephone number is (571)270-5341. The examiner can normally be reached on Monday through Friday; 7:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.W.
Art unit 1472

/Vickie Kim/
Supervisory Patent Examiner, Art Unit 4172